

Tutorial Sheet 23 (Answers)

1. Yes
2. a) Yes
b) No
c) No
3. a) 1, 2, 3, 4
b) $p(1) = 5/8$, $p(2) = 15/56$, $p(3) = 5/56$, $p(4) = 1/56$
4. a) 0, 1, 2, 3, 4
b) ${}_{10}C_5$ or 252
c) $({}_4C_x)({}_6C_{5-x})$
d)
$$p(x) = \frac{({}_4C_x)({}_6C_{5-x})}{{}_{10}C_5}$$

e) $p(0) = 1/42$, $p(1) = 5/21$, $p(2) = 10/21$, $p(3) = 5/21$, $p(4) = 1/42$
f)
$$p(x) = \frac{({}_bC_x)({}_wC_{n-x})}{{}_{b+w}C_n}$$